AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-2. (Canceled)

3. (Currently Amended) ~~The magnetoresistive head according to claim 1~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein said spin-valve film has a corrosion potential relative to a standard hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuAu, and ~~assuming~~ wherein the composition ratio of Cu:Au is $(100\text{-}a_1):a_1$ (where a_1 represents atomic %), respectively, the composition range thereof is such that $25 \leq a_1 < 100$, said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_1:c_1:d_1$ (where b_1, c_1 and d_1 represent atomic %), respectively, the composition ranges

thereof are such that $0 \leq b_1 \leq 75$, $15 \leq c_1 \leq 95$ and $5 \leq d_1 \leq 40$ (where $b_1 + c_1 + d_1 = 100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

4. (Currently Amended) ~~The magnetoresistive head according to claim 2,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein in said spin-valve film, each of said anti-ferromagnetic layer, said pinned layer, said free layer and said non-magnetic layer has a corrosion potential relative to a standard hydrogen electrode of +0.4, [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuAu, and ~~assuming~~ wherein the composition ratio of Cu:Au is $(100- a_1):a_1$ (where a_1 represents atomic %), respectively, the composition range thereof is such that $25 \leq a_1 < 100$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is b_1:c_1:d_1 (where b_1, c_1 and d_1 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_1 \leq 75$, $15 \leq c_1 \leq 95$ and $5 \leq d_1 \leq 40$ (where $b_1 + c_1 + d_1 = 100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

5-6. (Canceled)

7. (Currently Amended) ~~The magnetoresistive head according to claim 1,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein said spin-valve film has a corrosion potential relative to a standard hydrogen electrode of +0.4 [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L.

wherein said non-magnetic layer comprises CuPd, and ~~assuming~~ wherein the composition ratio of Cu:Pd is $(100\text{-}a_3):a_3$ (where a_3 represents atomic %), respectively, the composition range thereof is such that $5 \leq a_3 \leq 25$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_3:c_3:d_3$ (where b_3, c_3 and d_3 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_3 \leq 75$, $15 \leq c_3 \leq 95$ and $5 \leq d_3 \leq 40$ (where $b_3 + c_3 + d_3 = 100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

8. (Currently Amended) ~~The magnetoresistive head according to claim 2,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered, wherein

in said spin-valve film, each of said anti-ferromagnetic layer, said pinned layer, said free layer and said non-magnetic layer has a corrosion potential relative to a standard

hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L;

wherein said non-magnetic layer comprises CuPd, and ~~assuming~~ wherein the composition ratio of Cu:Pd is $(100 - a_3):a_3$ (where a_3 represents atomic %), respectively, the composition range thereof is such that $5 \leq a_3 \leq 25$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_3:c_3:d_3$ (where b_3, c_3 and d_3 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_3 \leq 75$, $15 \leq c_3 \leq 95$ and $5 \leq d_3 \leq 40$ (where $b_3+c_3+d_3=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

9. (Currently Amended) ~~The magnetoresistive head according to claim 1,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein said spin-valve film has a corrosion potential relative to a standard hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L.

wherein said non-magnetic layer comprises CuPt, and ~~assuming~~ wherein the composition ratio of Cu:Pt is $(100 - a_4):a_4$ (where a_4 represents atomic %), respectively, the composition range thereof is such that $5 \leq a_4 \leq 20$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_4:c_4:d_4$ (where b_4, c_4 and d_4 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_4 \leq 75$, $15 \leq c_4 \leq 95$ and $5 \leq d_4 \leq 40$ (where $b_4+c_4+d_4=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

10. (Currently Amended) ~~The magnetoresistive head according to claim 2,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically

isolating said pinned layer and said free layer are layered,

wherein in said spin-valve film, each of said anti-ferromagnetic layer, said pinned layer, said free layer and said non-magnetic layer has a corrosion potential relative to a standard hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L.

wherein said non-magnetic layer comprises CuPt, and ~~assuming~~ wherein the composition ratio of Cu:Pt is $(100 - a_4):a_4$ (where a_4 represents atomic %), respectively, the composition range thereof is such that $5 \leq a_4 \leq 20$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_4:c_4:d_4$ (where b_4, c_4 and d_4 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_4 \leq 75$, $15 \leq c_4 \leq 95$ and $5 \leq d_4 \leq 40$ (where $b_4+c_4+d_4=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

11. (Currently Amended) ~~The magnetoresistive head according to claim 1,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself

and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein said spin-valve film has a corrosion potential relative to a standard hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuRu, and ~~assuming~~ wherein the composition ratio of Cu:Ru is $(100 - a_5):a_5$ (where a_5 represents atomic %), respectively, the composition range thereof is such that $3 \leq a_5 \leq 15$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_5:c_5:d_5$ (where b_5, c_5 and d_5 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_5 \leq 75$, $15 \leq c_5 \leq 95$ and $5 \leq d_5 \leq 40$ (where $b_5+c_5+d_5=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

12. (Currently Amended) ~~The magnetoresistive head according to claim 2,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned

in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein in said spin-valve film, each of said anti-ferromagnetic layer, said pinned layer, said free layer and said non-magnetic layer has a corrosion potential relative to a standard hydrogen electrode of ↓0.4, [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuRu, and ~~assuming~~ wherein the composition ratio of Cu:Ru is $(100 - a_5):a_5$ (where a_5 represents atomic %), respectively, the composition range thereof is such that $3 \leq a_5 \leq 15$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_5:c_5:d_5$ (where b_5, c_5 and d_5 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_5 \leq 75$, $15 \leq c_5 \leq 95$ and $5 \leq d_5 \leq 40$ (where $b_5+c_5+d_5=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

13. (Currently Amended) ~~The magnetoresistive head according to claim 1,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in

contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein said spin-valve film has a corrosion potential relative to a standard hydrogen electrode of +0.4, [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuNi, and ~~assuming~~ wherein the composition ratio of Cu:Ni is $(100 - a_6):a_6$ (where a_6 represents atomic %), respectively, the composition range thereof is such that $25 \leq a_6 \leq 50$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_6:c_6:d_6$ (where b_6, c_6 and d_6 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_6 \leq 75$, $15 \leq c_6 \leq 95$ and $5 \leq d_6 \leq 40$ (where $b_6+c_6+d_6=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

14. (Currently Amended) ~~The magnetoresistive head according to claim 2,~~ A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein in said spin-valve film, each of said anti-ferromagnetic layer, said pinned layer, said free layer and said non-magnetic layer has a corrosion potential relative to a standard hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuNi, and ~~assuming~~ wherein the composition ratio of Cu:Ni is $(100 - a_6):a_6$ (where a_6 represents atomic %), respectively, the composition range thereof is such that $25 \leq a_6 \leq 50$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_6:c_6:d_6$ (where b_6, c_6 and d_6 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_6 \leq 75$, $15 \leq c_6 \leq 95$ and $5 \leq d_6 \leq 40$ (where $b_6+c_6+d_6=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

15. (Currently Amended) ~~The magnetoresistive head according to claim 1, A~~ magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein said spin-valve film has a corrosion potential relative to a standard hydrogen electrode of +0.4, [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuRh, and ~~assuming~~ wherein the composition ratio of Cu:Rh is $(100 - a_7):a_7$ (where a_7 represents atomic %), respectively, the composition range thereof is such that $7 \leq a_7 \leq 20$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_7:c_7:d_7$ (where b_7, c_7 and d_7 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_7 \leq 75$, $15 \leq c_7 \leq 95$ and $5 \leq d_7 \leq 40$ (where $b_7+c_7+d_7=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-formed magnetic recording medium.

16. (Currently Amended) ~~The magnetoresistive head according to claim 2~~, A magnetoresistive head, comprising:

a spin-valve film as a magnetic sensor element for detecting magnetic signals while in contact with a magnetic recording medium, said spin-valve film having a structure in which an anti-ferromagnetic layer, a pinned layer in which the direction of magnetization is pinned in a predetermined direction by an exchange-coupling magnetic field at work between itself and said anti-ferromagnetic layer, a free layer in which the direction of magnetization changes in accordance with an external magnetic field, and a non-magnetic layer for magnetically isolating said pinned layer and said free layer are layered,

wherein in said spin-valve film, each of said anti-ferromagnetic layer, said pinned layer, said free layer and said non-magnetic layer has a corrosion potential relative to a standard hydrogen electrode of +0.4. [V vs. SHE] or greater when immersed in a NaCl solution of a concentration of 0.1 mol/L,

wherein said non-magnetic layer comprises CuRh, and ~~assuming~~ wherein the composition ratio of Cu:Rh is $(100 - a_7):a_7$ (where a_7 represents atomic %), respectively, the composition range thereof is such that $7 \leq a_7 \leq 20$,

said pinned layer and said free layer comprise one of NiFe and CoNiFe, and ~~assuming~~ wherein the composition ratio of Co:Ni:Fe is $b_7:c_7:d_7$ (where b_7, c_7 and d_7 represent atomic %), respectively, the composition ranges thereof are such that $0 \leq b_7 \leq 75$, $15 \leq c_7 \leq 95$ and $5 \leq d_7 \leq 40$ (where $b_7+c_7+d_7=100$ atomic %), and

said magnetoresistive head detects magnetic signals while in contact with a tape-

formed magnetic recording medium.

17-20. (Canceled)

21. (Original) The magnetoresistive head according to claim 3, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

22. (Original) The magnetoresistive head according to claim 4, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

23-24. (Canceled)

25. (Original) The magnetoresistive head according to claim 7, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

26. (Original) The magnetoresistive head according to claim 8, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

27. (Original) The magnetoresistive head according to claim 9, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

28. (Original) The magnetoresistive head according to claim 10, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

29. (Original) The magnetoresistive head according to claim 11, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

30. (Original) The magnetoresistive head according to claim 12, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

31. (Original) The magnetoresistive head according to claim 13, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

32. (Original)The magnetoresistive head according to claim 14, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting

said tape-formed magnetic recording medium by a helical scan method.

33. (Original) The magnetoresistive head according to claim 15, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

34. (Original) The magnetoresistive head according to claim 16, wherein said magnetic sensor element is mounted on a rotary drum and detects magnetic signals while contacting said tape-formed magnetic recording medium by a helical scan method.

35-36. (Canceled)